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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,996	10/25/2001	Jurgen Ramm	H60-104 US	3331

21706 7590 07/31/2003

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SUITE 110
ORANGEBURG, NY 10962-2100

EXAMINER

HITESHEW, FELISA CARLA

ART UNIT	PAPER NUMBER
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1765

DATE MAILED: 07/31/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/002,926

Applicant(s)

Ramm

Examiner

H. F. Hew

Group Art Unit

1765

--The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address--

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-48 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1, 15, 37 is/are rejected.
- ☒ Claim(s) 2-14, 16-36 and 38-48 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____.

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 1 ✓
- ☒ Notice of References Cited, PTO-892
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The Information Disclosure Statement under 37 C.F.R. 1.97 has been received and reviewed. However, the information disclosure is not deemed to be pertinent over the prior art of record.

Drawings

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

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Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.185(a). Failure to take corrective action within the set (or extended) period will result in **ABANDONMENT** of the application.

2. The drawings filed on 10/25/2001 are acceptable subject to correction of the informalities indicated on the attached "Notice of Draftsperson's Patent Drawing Review," PTO-948. In order to avoid abandonment of this application, correction is required in reply to the Office action. The correction will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. Claim 1 recites the limitation "Method" in line 1. There is insufficient antecedent basis for this limitation in the claim. Please insert the word -- A -- before the word "method" for proper antecedence.

4. Claims 2-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terminology "...characterized in that..." does not meet up to date U.S. Patent practice standards. Is the claim language open or closed? The terminology is vague and indefinite.

5. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 15, lines 2-3, "predetermined minimum time period..." is being considered vague and indefinite. What is the minimum time period? A claim is indefinite where it specifies "predetermined" temperatures, etc., when "predetermined" according

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to applicant's (or applicants') definition, merely means determined before hand. See *Seagrams & Sons Inc., vs Mattell*, 84 U.S.P.Q. 180. Therefore, the claim(s) is\are unpatentable under 35 U.S.P.Q. 112 second paragraph.

The use of "predetermined" reads on a nebulous mental step conducted prior to the manipulative steps of the claimed invention, hence rendering the present process claims unclear in meaning and scope. If applicant wishes to patent detailed controls over the recited process, they must be positively recited.

Claim 37 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 37, line 2, and the terminology "predetermined number of passes..." is being considered vague and indefinite. What is the number of passes of numerical range of passes?

A claim is indefinite where it specifies "predetermined" temperatures, etc., when "predetermined" according to applicant's (or applicants') definition, merely means determined before hand. See *Seagrams & Sons Inc., vs Mattell*, 84 U.S.P.Q. 180. Therefore, the claim(s) is\are unpatentable under 35 U.S.P.Q. 112 second paragraph.

The use of "predetermined" reads on a nebulous mental step conducted prior to the manipulative steps of the claimed invention, hence rendering the present process claims unclear in meaning and scope. If applicant wishes to patent detailed controls over the recited process, they must be positively recited.

Allowable Subject Matter

6. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

7. Claims 2-14; 16-36 and 38-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: The most relevant prior art of reference was U.S. Patent No. 5, 916, 365 (Sherman). However, it does not teach nor fairly suggest singularly or in any combination thereof a method for producing substrates charged with materials, in which a) at least one substrate is introduced into an evacuated vacuum container; b) the surface of the substrate to be charged is exposed to a reactive gas which is adsorbed on the surface; c) the exposure of the surface to the reactive gas is terminated; d) the reactive gas adsorbed on the surface is allowed to react, characterized in that d₁) the surface with the adsorbed reactive gas is exposed to a low-energy plasma discharge with ion energy E_{10} on the surface of the substrate of:

$$0 < E_{10} < 20 \text{ eV}$$

and an electron energy E_{eo} of

$$0 < E_{eo} < 100 \text{ eV};$$

d₂) the adsorbed reactive gas is allowed to react at least with the cooperation of plasma-generated ions and electrons.

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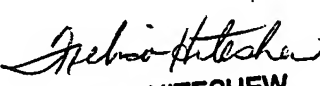
Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTOL 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felisa Hiteshew whose telephone number is (703) 308-2545. The examiner can normally be reached on Mondays through Thursdays from 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Utech, can be reached on (703) 308-3836. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


FELISA HITESHEW
PRIMARY EXAMINER
AU 1765